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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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08/766,607 12/13/96 JACOBSEN

J KPN96-03A

EXAMINER

TM02/0403

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ART UNIT

PAPER NUMBER

2673

DATE MAILED:

04/03/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

08/766,607

Applicant(s)

JACOBSEN ET AL.

Examiner

Jeff Piziali

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 January 2001.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☐ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 18) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other: _____.

DETAILED ACTION

Drawings

1. This application has been filed with informal drawings which are acceptable for examination purposes only. Formal drawings will be required if the application is allowed.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilska et al. (United Kingdom - 2,289,555) in view of Fan et al. (5,815,126).

In regards to claim 1, Wilska et al. disclose a docking system for a wireless telephone comprising: a display housing [1] (see Figures 1-3; Page 5, Paragraph 3) having a plurality of control elements [10, 11] (see Figure 3; Page 4, Paragraph 3) and a connection port [8] that electrically connects a display circuit [6] within the display housing to a handheld wireless telephone housing [17] docked with the display housing such that image data received by the wireless telephone is received by the display circuit, the display housing having a docking surface on which the handheld wireless telephone housing is mounted (see Figure 3; Page 5, Paragraph 3) and a liquid crystal display [9] (see Figures 1-2; Page 4, Paragraph 2). Wilska et al. does not expressly disclose an active matrix LCD, a light source nor a magnifying image lens.

However, Fan et al. discloses an active matrix liquid crystal display (see Column 1, Lines 45-58), a light source [490] in a display housing [412] (see Figure 19; Column 13, Lines 7-34) and a magnifying image lens [1907] in a display housing [1905] (see Figure 52A; Column 23, Lines 7-11). Wilska et al. and Fan et al. are analogous art because they are from the field of portable communication and display devices.

Thus, it would have been obvious to a person of ordinary skill in the art, at the time of the invention, to utilize Fan's active matrix LCD, light source and magnifying lens with Wilska's communication device to provide a high quality liquid crystal image that's easy to see (and read) even in the dark.

In regards to claim 2, Wilska et al. disclose at least a 320 x 240 pixel array (see Page 4, Paragraph 2).

In regards to claim 3, Wilska et al. do not expressly disclose a 640 x 480 pixel array. However, Fan et al. disclose at least a 640 x 480 pixel array (see Column 3, Lines 30-35). For the purpose of providing enhanced picture quality, it would have been obvious to combine Wilska et al. and Fan et al. to obtain the invention as specified in claim 3.

In regards to claim 4, Wilska et al. do not expressly disclose a transistor circuit array formed with single crystal silicon bonded to an optically transmissive substrate (see Column 1, Lines 45-58). However, Fan et al. disclose a transistor circuit array formed with single crystal silicon bonded to an optically transmissive substrate (see Column 1, Lines 45-58). For the

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purpose of providing fast operation, it would have been obvious to combine Wilska et al. and Fan et al. to obtain the invention as specified in claim 4.

In regards to claim 5, Wilska et al. disclose a transmitter (see Figures 1-2; Page 5, Paragraph 3).

In regards to claim 6, Wilska et al. disclose a housing having a volume less than 1000 cm³ (see Page 3, Paragraph 8).

In regards to claim 7, Wilska et al. disclose a docking system [17] for a handheld wireless telephone [17] comprising: a handheld housing [1] having a plurality of control elements [10, 11] and a connection port [8] that electrically connects a display circuit [6] within the housing to the handheld wireless telephone [17] docked with the housing (see Figures 1-3; Page 4, Paragraph 3 and Page 5, Paragraph 3), the handheld housing having a docking surface on which the handheld wireless telephone housing is mounted, a display subhousing [9] carried by the housing and moveable between a storage and operating position (see Figures 7-9), and a liquid crystal display [9] (see Figures 1-2; Page 4, Paragraph 2). Wilska et al. do not expressly disclose an active matrix LCD, an LED light source nor a magnifying image lens.

However, Fan et al. disclose an active matrix liquid crystal display (see Column 1, Lines 45-58), an LED light source [490] in a display subhousing [412] (see Figure 19; Column 2, Lines 55-60 and Column 13, Lines 7-34) and a magnifying image lens (see Figure 52A; Column 23,

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Lines 7-11). For the reasons set forth in the above rejection of claim 1, it would have been obvious to combine Wilska et al. and Fan et al. to obtain the invention as specified in claim 7.

In regards to claim 8, Wilska et al. do not expressly disclose a timing circuit. However, Fan et al. disclose a timing circuit (see Column 8, Lines 44-56). For the purpose of regulating flow to the display, it would have been obvious to combine Wilska et al. and Fan et al. to obtain the invention as specified in claim 8.

In regards to claim 9, Wilska et al. disclose a battery [3] (see Figure 3).

In regards to claim 10, Wilska et al. disclose a cradle [16] (see Figure 2; Page 5, Paragraph 2). For the purpose of securing the telephone to the communication device, it would have been obvious to utilize Wilska's cradle to connect a telephone and to obtain the invention as specified in claim 10.

In regards to claim 11, Wilska et al. disclose a connector [8] adapted to be received in a port in the wireless telephone [17], further comprising a latch [16]. For the purpose of securing the telephone to the communication device, it would have been obvious to utilize Wilska's latch to connect a telephone and to obtain the invention as specified in claim 11.

In regards to claim 12, Wilska et al. disclose a hidden lens in the storage position and a viewable lens in the operating position (see Figures 7-9; Page 10, Paragraph 3).

In regards to claim 13, Wilska et al. disclose a rotatable display subhousing (see Figures 7-9; Page 10, Paragraph 3).

In regards to claim 14, Wilska et al. disclose a display subhousing that translates relative to the housing (see Figures 7-9; Page 10, Paragraph 3).

In regards to claim 15, Wilska et al. disclose a display that both rotates and moves translationally (see Figures 7-9; Page 10, Paragraph 3).

In regards to claim 16, Wilska et al. does not expressly disclose the array of pixel electrodes has a diagonal of 0.25 inches. However, for the purposes of manufacturing an easy to read display while keeping the display small and portable, it would have been obvious to utilize a diagonal of 0.25 inches to obtain the invention as specified in claim 16.

In regards to claim 17, Wilska et al. disclose a docking system [17] for a handheld wireless telephone [17] comprising: a housing [1] having a plurality of control elements [10, 11] and a connection port [8] that electrically connects a display circuit [6] within the housing to a handheld wireless telephone [17] docked with the housing, the housing having a docking surface on which the handheld wireless telephone housing is mounted (see Figures 1-3; Page 4, Paragraph 3 and Page 5, Paragraph 3), a display subhousing module [9] movable from a storage position to an operating position relative to the housing (see Figures 7-9) and a liquid crystal

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display [9] (see Figures 1-2; Page 4, Paragraph 2) and a battery [3] (see Figure 3). Wilska et al. do not expressly disclose an active matrix LCD, an LED light source or a magnifying image lens.

However, Fan et al. disclose an active matrix liquid crystal display (see Column 1, Lines 45-58 and Column 3, Lines 25-37), an LED light source [490] in a display subhousing [412] (see Figure 19; Column 2, Lines 55-60 and Column 13, Lines 7-34), and a magnifying image lens [1907] in a display subhousing [1905] (see Figure 52A; Column 23, Lines 7-11). For the reasons set forth in the above rejection of claim 1, it would have been obvious to combine Wilska et al. and Fan et al. to obtain the invention as specified in claim 17.

In regards to claim 18, Wilska et al. do not expressly disclose a backlight. However, Fan et al. disclose a backlight (see Figure 19; Column 13, Lines 7-34). For the reasons set forth in the above rejection of claim 1, it would have been obvious to combine Wilska et al. and Fan et al. to obtain the invention as specified in claim 18.

In regards to claim 19, Wilska et al. do not expressly disclose a side illumination device. However, Fan et al. disclose a side illumination device (see Column 2, Lines 49-55). For the reasons set forth in the above rejection of claim 1, it would have been obvious to combine Wilska et al. and Fan et al. to obtain the invention as specified in claim 19.

In regards to claim 20, Wilska et al. do not expressly disclose a timing circuit. However, Fan et al. disclose a timing circuit (see Column 8, Lines 44-56). For the purpose of regulating

flow to the display, it would have been obvious to combine Wilska et al. and Fan et al. to obtain the invention as specified in claim 20.

In regards to claim 21, Wilska et al. do not expressly disclose drawing less than 0.2 watts. However, for the purpose of drawing very little power, it would have been obvious to draw less than 0.2 watts to obtain the invention as specified in claim 21.

In regards to claim 22, Wilska et al. disclose a method of displaying an image on a docking system [1] in conjunction with a wireless telephone [17], comprising the steps of: providing a docking station system [1] having an LCD [9], a display control circuit [6], a connection port [8] and a docking surface; providing a wireless telephone handset [17] having a transceiver capable of receiving audio and image data, and a connection port that mates with the connection port of the docking station, the wireless telephone having a speaker [19] and a microphone [20]; electrically connecting the wireless telephone with the docking surface of the docking station such that the display control circuit in the docking station receives image data from the transceiver, the wireless telephone being attached to the docking station at the connection port; and operating the display control circuit connected to the transceiver and the matrix display to display an image on the display using the image data (see Figures 1-3; Page 5, Paragraph 3). Wilska et al. do not expressly disclose an active matrix LCD.

However, Fan et al. disclose an active matrix LCD (see Column 1, Lines 45-58). For the reasons set forth in the above rejection of claim 1, it would have been obvious to combine Wilska et al. and Fan et al. to obtain the invention as specified in claim 22.

In regards to claim 23, Wilska et al. disclose a battery [3] (see Figure 3).

In regards to claim 24, Wilska et al. disclose a camera [15, 16] (see Figures 1-3; Page 4, Paragraph 5).

In regards to claim 25, Wilska et al. disclose selecting to view the camera image on the display, or transmitting the image to a remote location (see Figures 1-3; Page 5, Paragraph 1).

Response to Arguments

4. Applicants' arguments filed January 18, 2001 have been fully considered but they are not persuasive.

The Applicants contend Wilska does not disclose a display having an active area of less than 100mm^2 . The examiner respectfully disagrees. Wilska teaches a display having "the dimensions *in the order of* 130 mm x 70 mm" (Page 4, Paragraph 2 -- emphasis added). While the Applicants may disagree that a display area of 100mm^2 is in the order of Wilska's dimensional disclosure; the fact remains that Wilska does teach a variably sized display area. Furthermore, such a small display (100mm^2) would certainly have been commonly known of at the time of invention; and the motivation to utilize such a small display would have been naturally understood, by an artisan at the time of invention, as conserving overall system size and weight.

The Applicants argue Wilska does not disclose a connection port between a housing and a wireless telephone. The examiner must again respectfully differ. Wilska teaches a wireless telephone [Fig. 3; 17] and a housing [Fig. 3; 1] operably connected by a port [Fig. 3; 8] (Page 5, Paragraph 3). While the Applicants argue the indistinctness of the aforementioned devices; Wilska's utilization of unique reference numerals for each of the telephone, housing and port would seem to suggest otherwise.

The Applicants assert Wilska does not disclose a display subhousing moving relative to a housing. The examiner kindly disagrees. Wilska teaches a keyboard/digitizer pad [Fig. 9; 30] forming a mechanical extension of the notebook housing [[Fig. 9; 1] (Page 10, Paragraph 3). In this manner, the display subhousing [Fig. 7; 9] can be understood to move relative to the housing [i.e. Fig. 9; 30].

Lastly, the Applicants contend Wilska does not teach electrically connecting the wireless telephone with the docking surface of the docking station such that the display control circuit in the docking station receives image data from the transceiver, the wireless telephone being attached to the docking station at the connection port. The examiner respectfully differs. Wilska teaches electrically connecting the wireless telephone [Fig. 3; 17] with the docking surface of the docking station [Fig. 3; 1] such that the display control circuit [Fig. 3; 6] in the docking station receives data from the transceiver [Fig. 3; 17], the wireless telephone being attached to the docking station at the connection port [Fig. 3; 8] (Page 5, Paragraph 3). While Wilska does not explicitly use the term '*image* data', it does disclose integrating the telephone unit with a modem. Since modems were (and are) commonly utilized for the transfer of image data, it would have

been understood, by an artisan at the time of invention, to make use of such inherent communicational capabilities within Wilska's device, so as to provide full functionality.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeff Piziali whose telephone number is (703) 305-8382. The examiner can normally be reached on Monday - Friday (6:30AM - 3PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached on (703) 305-4938. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-6606 for regular communications and (703) 308-9051 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.



J.P.

March 28, 2001



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